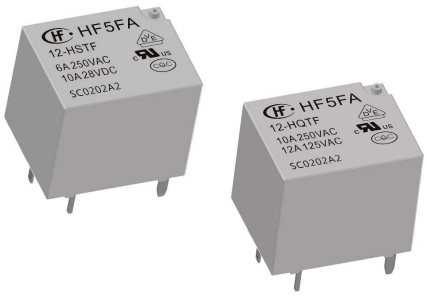
HF5FA MINIATURE HIGH POWER RELAY

File No.:E133481

File No.:40057246

File No.:CQC23002383478



Features

- Small volume and low height
- 1 Form A and 1 Form C configurations
- UL insulation system: Class F available
- Outline dimensions：(15.8×12.4×13.6) mm

RoHS compliant

CONTACT DATA

Contact arrangement	1A	1C	
		NO	NC
Contact resistance	100 mΩ max. (1A 6VDC)		
Contact material	$AgSnO_2$		
Contact rating (Res. load)	Standard: 6A 250VAC/ High Load: 10A 250VAC		5A 250VAC
	10A 28VDC		5A 28VDC
Max.swtiching voltage	277VAC/28VDC		
Max.switching current	12A		
Mechanical endurance	1×10^7 OPS		
Electrical endurance	NO: Standard: 6A 250VAC Resistive load 85℃ 5×10^4 OPS High Load: 10A 250VAC Resistive load 85℃ 1×10^5 OPS NC: 5A 250VAC Resistive load room temp. 3×10^4 OPS		

Notes: 1) The data shown above are initial values.
2) If plastic sealed is used, please contact us.

COIL

Coil power	Approx. 450mW

Notes: 1) The coil holding voltage is the voltage applied to coil 100ms after the rated voltage.

COIL DATA at 23℃

Nominal Voltage VDC	Pick-up Voltage VDC[1] max.	Drop-out Voltage VDC min.	Max. Coil Voltage[2] VDC	Coil Resistance Ω
3	2.25	0.3	3.9	20 ×(1±10%)
5	3.75	0.5	6.5	55 ×(1±10%)
9	6.75	0.9	11.7	180 ×(1±10%)
12	9	1.2	15.6	320 ×(1±10%)
18	13.5	1.8	23.4	720 ×(1±10%)
24	18	2.4	31.2	1280 ×(1±10%)
48	36	4.8	62.4	5120 ×(1±10%)

Notes: 1) The data shown above are initial values.
2) Maximum voltage refers to the maximum voltage which relay coil could endure in a short period of time.

CHARACTERISTICS

Insulation resistance		100MΩ(500VDC)
Dielectric strength	Between coil & contacts	2000VAC 1min
	Between open contacts	750VAC 1min
Operate time(at rated voltage)		10ms max.
Release time(at rated voltage)		5ms max.
Shock resistance	Functional	98m/s²
	Destructive	980m/s²
Vibration resistance		10Hz to 55Hz 1.5mm DA
Humidity		5% to 85%RH
Ambient temperature		-40℃ to 85℃
Termination		PCB
Unit weight		Approx. 5g
Construction		Plastic sealed,Flux proofed

Notes: 1) The data shown above are initial values.

SAFETY APPROVAL RATINGS

UL/CUL	NO	6A 277/250/125VAC 85℃ 10A 277/250/125VAC 85℃(High Load) 12A 125VAC 85℃(High Load) 1/2HP 250VAC 85℃(High Load) 1/4HP 120VAC 85℃(High Load) 10A 28VAC Room temp.
	NC	5A 277/250/125VAC Room temp. 5A 28VDC Room temp.
VDE	NO	6A 250/125VAC 85℃ 10A 250/125VAC 85℃(High Load) 12A 125VAC(High Load)
	NC	5A 250/125VAC Room temp.
CQC	NO	6A 277/250/125VAC 85℃ 10A 277/250/125VAC 85℃(High Load) 12A 125VDC 85℃(High Load)
	NC	5A 277/250/125VAC Room temp.

Notes: The typical loads listed above are only part of the product certification. The detailed test conditions of each load are different,so the electrical durability is different. For more information, please contact us.

ORDERING INFORMATION

	HF5FA/	12	-H	S	Q	T	F	（XXX）
Type								
Coil voltage	3,5,9,12,18,24,48 VDC							
Contact arrangement	**H:** 1 Form A **Z:** 1 Form C							
Construction	**S**：Plastic sealed **NIL:** Flux proofed							
Contact rating	**Q**：High Load **NIL:** Standard type							
Contact material	**T:** $AgSnO_2$							
Insulation class	**F:** Class F							
Special code	**XXX:** Customer special requiremen；**Nil:** Standard							

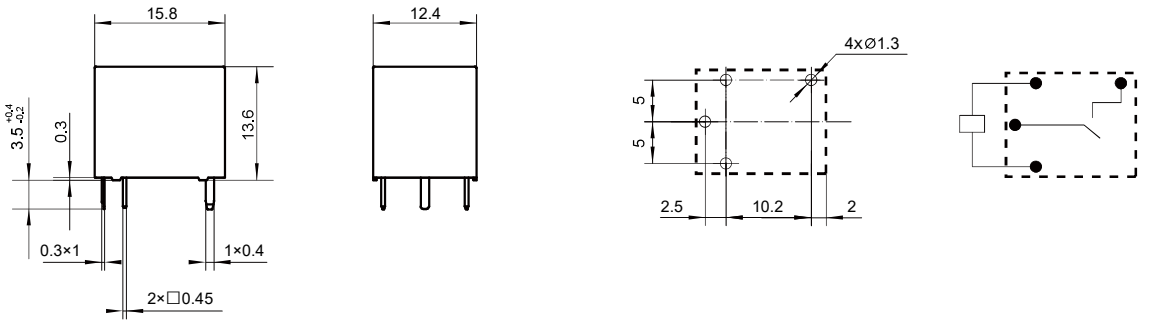
Notes：1) If plastic sealed is used, please contact us.

OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

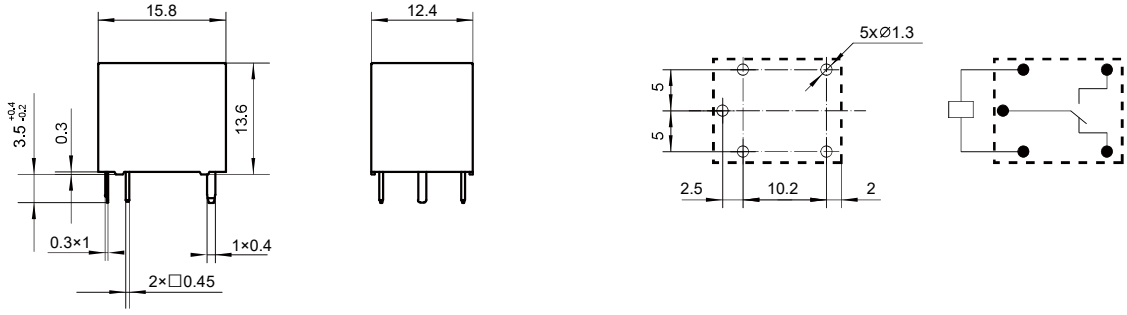
Unit: mm

Outline Dimensions | PCB Layout (Bottom view) | Wiring Diagram (Bottom view)

1 Form A



1 Form C



OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

Notes: 1) The pin dimension of the product outline drawing is the size before tinning (it will become larger after tinning), and the mounting hole size is the recommended design size of the PCB board hole. The specific PCB board hole design size can be mapped and adjusted according to the actual product.
2) In case of no tolerance shown in outline dimension: outline dimension ≤1mm, tolerance should be ±0.2mm; outline dimension >1mm and≤5mm, tolerance should be ±0.3mm; outline dimension >5mm, tolerance should be ±0.4mm；
3) The tolerance without indicating for PCB layout is always ±0.1mm.